

REMARKS

Claims 14-19 and 21-29 are pending in the present application. Claims 14, 16, 17, 22 and 25 were amended in this response, and new claim 29 was added. Claim 20 was canceled, without prejudice. No new matter has been introduced as a result of the amendments. Support for the amendments may be found, for example, in paragraphs [0017-19] of the present specification. Favorable reconsideration is respectfully requested.

The claims were objected to for informalities. In light of the present amendments, Applicant submits the objectionable matter has been addressed. Withdrawal of the objections is earnestly requested.

Claims 19 and 24 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant thanks the examiner for pointing out the allowable matter.

Claims 14, 22 and 25 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In light of the present amendments to claims 14, 22 and 25, Applicant submits the objectionable matter has been addressed. Withdrawal of the rejection is earnestly requested.

Claims 14-17, 22 and 23 were rejected under 35 U.S.C. §103(a) as being obvious over *Wagner et al.* (US Pub. 2002/0040940) in view of *Hamburg et al.* (US Patent 6,131,439). Claims 18, 26 and 27 were rejected under 35 U.S.C. §103(a) as being obvious over *Wagner et al.* (US Pub. 2002/0040940) in view of *Hamburg et al.* (US Patent 6,131,439) and further in view of Wong (US patent 6,166,647). Applicant respectfully traverses these rejections.

Regarding new independent claim 29, this claim incorporates the subject matter of original claim and claim 19, which was indicated as allowable.

Regarding independent claims 14 and 22, Applicant submits that the prior art, alone or in combination fails to teach or suggest the features of “determining a second measurement value of the oxygen concentration in the drawn air sample using a reference oxygen sensor, wherein the reference oxygen is switched on at regular time intervals during the step of determining the second measurement value to prevent ageing of the reference oxygen sensor; comparing the first

measurement value to the second measurement value; and issuing a disturbance signal from one of the oxygen sensor or the reference oxygen sensor when deviation of the first measurement value from the second measurement value exceeds a predetermined amount” as claimed in claim 14 and similarly recited in claim 22.

Wagner discloses an inerting method for preventing and extinguishing fires in enclosed spaces (Abstract, FIG. 1). The inerting apparatus of *Wagner*, a two-step inerting method is disclosed using a single oxygen sensor (ref. 10, FIG. 1, [0013]), where the oxygen content in an enclosed room is lowered to a certain basic inerting level, and, in the case of a fire, the oxygen content is further lowered to a certain complete inerting level. The disclosure on *Wagner* is directed to extinguishing a fire by keeping a stored volume of inert gas cylinders at a minimum [0015-17]. As the Office Action has conceded, *Wagner* fails to teach a reference oxygen sensor. Applicant submits that it follows that *Wagner* cannot teach the use of first and second oxygen concentration sensors in order to independently measure the oxygen concentration in the enclosed room, and further cannot teach the periodic switching on at regular time intervals of a sensor to prevent an aging of the reference oxygen concentration sensor.

Regarding *Hamburg*, the reference relates to a catalyst deterioration detection system with sensor calibration (see Abstract). Specifically, *Hamburg* discloses a first oxygen sensor (22) mounted upstream of a catalyst (18). A second oxygen sensor (24) mounted downstream of the catalyst (18) (col. 2, lines 54-60). Both oxygen sensors (22, 24) located upstream and downstream of the catalyst should have generally equal outputs following a cold start of the engine (col. 3, lines 40 to 45). Accordingly, for calibrating both sensors, the signal values output by the first and the second sensors are compared with each other. If a difference in the averages is detected between the two sensors, then a difference value is set. If the difference is above an error threshold, then this indicates a failure of one of the sensor which is then output as a sensor error. If the difference in sensor average readings is not unacceptably large, then re-calibration of one or both of the sensors is performed (col. 3, line 47 - col. 4, line 24). Thus, under *Hamburg*, any measured difference is vitiated through calibration soon after the beginning of the engine operation, before the catalyst becomes active (col. 3, lines 47 to 56).

It is clear from the disclosure in *Hamburg* that the reference fails to teach or suggest oxygen sensors being switched on only for regular intervals during the step of determining a

second measurement value of the oxygen concentration in an air sample in order to prevent aging of the reference oxygen sensor. Also, *Hamburg et al* is completely silent with respect to a system for measuring the oxygen content in a closed area space in order to monitor inertization levels in an inert gas device to control fire.

Furthermore, Applicants submit that there is no teaching, suggestion or motivation for one of ordinary skill in the art to combine the *Wagner* and *Hamburg* references in the manner suggested in the Office Action. In making a determination that an invention is obvious, the Patent Office has the initial burden of establishing a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S. P.Q.2d 1955, 1956 (Fed. Cir. 1993). "If the examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent." *In re Oetiker*, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992).

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). When the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986). (see MPEP 2142).

Further, the Federal Circuit has held that it is "impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." *In re Fritch*, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). "One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention" *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Moreover, the Federal Circuit has held that "obvious to try" is not the proper standard under 35 U.S.C. §103. *Ex parte Goldgaber*, 41 U.S.P.Q.2d 1172, 1177 (Fed. Cir. 1996). "An-obvious-to-try situation exists when a general disclosure may pique the scientist curiosity, such that further investigation might be done as a result of the disclosure, but the disclosure itself does not contain a sufficient teaching of how to obtain the desired result, or that the claim result would be obtained if certain directions were pursued." *In re Eli Lilly and Co.*, 14 U.S.P.Q.2d 1741, 1743 (Fed. Cir. 1990).

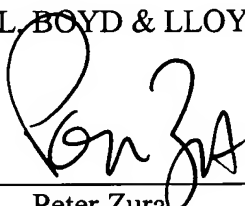
As discussed above, *Wagner* is directed to extinguishing fires in enclosed areas by keeping a stored volume of inert gas cylinders at a minimum. In contrast, *Hamburg* teaches the calibration of catalysis in an engine compartment where the catalysts have gas added or subtracted to reach an optimal operating condition (see col. 4, lines 60-66). Thus, *Hamburg* clearly teaches away from the configuration disclosed in *Wagner*, and otherwise provides no teaching, suggestion or motivation to combine the disclosure with *Wagner*.

In light of the amendments and arguments submitted herein, Applicant respectfully submits that the rejection under 35 U.S.C. §103 is improper and should be withdrawn. Applicants respectfully request that a timely Notice of Allowance be issued in this case. If any additional fees are due in connection with this application as a whole, the Examiner is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket no. (0114745-009) on the account statement.

Respectfully submitted,

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